

METHODS FOR THE IDENTIFICATION OF INHIBITORS OF PECTIN
ESTERASE EXPRESSION OR ACTIVITY IN PLANTS

ABSTRACT OF THE DISCLOSURE

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The present inventors have discovered that pectin esterase is essential for plant growth. Specifically, the inhibition of pectin esterase gene expression resulted in seedlings that were damaged, short, and stunted at a very early growth stage. Thus, pectin esterase can be used as a target for the identification of herbicides.

10 Accordingly, the present invention provides methods for the identification of compounds that inhibit pectin esterase expression or activity, comprising: contacting a compound with a pectin esterase and detecting the presence and/or absence of binding between said compound and said pectin esterase, or detecting a decrease in pectin esterase expression or activity. The methods of the invention are useful for the

15 identification of herbicides.